DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 70.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-004483
Date Inspected: 20-Oct-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Japan Steel Works

OSM Arrival Time: 900
OSM Departure Time: 1900
Location: Muroran, Japan

CWI Name: Pan Han

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Tower,Jacking and Deviation Saddle

Summary of Items Observed:
The following report is based on METS observations at Japan Steel Works (JSW) in Muroran Japan. Current work: Casting, machining and repair of Saddles.

FABRICATION SHOP # 4

On this date the Caltrans Quality Assurance (QA) inspector, Dong J. Shin arrived at JSW fabrication shop number 4 and observed the in process assembly fit-up operation of the structural steel plates for the Tower Jacking Saddle base T1-2. The JSW fitter personnel Kiyotaka Koanagi began assembly of the Tower Jacking Saddle base T1-2 by aligning the stem plate to therib plate, joint designation 2-14. The JSW welding personnel Y. Otha performed the in process tack welding utilizing the Shielded Metal Arc Welding (SMAW) process per the welding procedure specification (WPS) SJ-3011-1. The welding parameters and heat control were monitored by Intertek Testing Services Quality Control (QC) inspector Mr. Han at periodic intervals. The minimum preheat temperature of 160 degrees Celsius and maximum interpass temperature of 260 degrees Celsius was verified to meet the WPS requirements by Mr. Kuan and the QA inspector utilizing Tempilstik temperature indicators. This data was entered into the QC inspector's daily log, identifying the location on a weld map.

Mr. M. Kato and Mr. Mr. Kubota performed welding on W2-E1 fill pass weld on E1Y-4Vand E1Y-12V rib plate to rib plate and rib plate to stem plate of W2E1 casting to steel structure. The fill pass welding (FCAW) process per the welding procedure specification (WPS) SJ-3011-5 and SJ 3011-6. The welding was performed in the 2G (Horizontal) position. The filler metal utilized was identified as 1.6mm diameter, Class E90T5-K2C H4, Brand name TM 95K2. The welding parameters and heat control were monitored by Intertek Testing Services Quality

Control (QC) inspector Mr. Chung-Fu Kuan at periodic intervals. The minimum preheat temperature of 160 degrees Celsius and maximum interpass temperature of 260 degrees Celsius was verified to meet the WPS requirements by Mr. Han and the QA inspector utilizing Tempilstik temperature indicators. This data was entered into the QC inspector's daily log, identifying the location on a weld map. The SMAW welding average amperage and voltage by clamp type meter and travel speed were verified to be within the welding procedure specification parameter range of 325amps to 350 amps, 35 volts to 38 volts and travel speed of 255 to 310 mm per minute for the 1.6mm Wire. The work was not completed on this date and appears to meet the minimum requirements of the welding procedure specification and contract documents.

Summary of Conversations:

No specific conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer